

TRANSLATION

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing 16.11.2004
(day/month/year)

FOR FURTHER ACTION

See paragraph 2 below

International filing date (day/month/year)

PCT/JP2004/015258

15.10.2004

Priority date (day/month/year)	
--------------------------------	--

17.10.2003

International Patent Classification (IPC) or both national classification and IPC

C08L9/02, C08L33/06, C08L33/20

Applicant

ZEON CORPORATION

1. This opinion contains indications relating to the following items:

☒

Box No. 1	Basis of the opinion
-----------	----------------------

☐

Box No. 11 Priority



Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

☐

Box No. IV Lack of unity of invention

☒

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement

☐

Box No. VI Certain documents cited

Box No. VII Certain defects in the international application

☐

Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JIP

Authorized officer _____

Facsimile No

Telephone No. _____

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/015258

Box No. 1 Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐

This opinion has been established on the basis of a translation from the original language into the following language

_____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐

a sequence listing

☐

table(s) related to the sequence listing

b. format of material

☐

in written format

☐

in computer readable form

c. time of filing/furnishing

☐

contained in the international application as filed.

☐

filed together with the international application in computer readable form.

☐

furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/015258

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 1-5	YES
	Claims	NO
Inventive step (IS)	Claims 1-5	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-5	YES
	Claims	NO

2. Citations and explanations:

Document 1: JP 2002-47379 A (Nippon Zeon Co., Ltd.), 12 February 2002

Document 2: JP 9-309975 A (Nippon Zeon Co., Ltd.), 2 December 1997

Document 3: US 4654404 A (Nippon Zeon Co., Ltd.), 31 March 1987

Claims 1-3

The inventions set forth in claims 1-3 involve an inventive step relative to documents 1-3, cited in the international search report.

Document 1-3 do not disclose a polymer alloy constituted from (A) an α,β -ethylenic unsaturated nitrile/conjugated diene copolymer rubber having a number average molecular weight of 50,000-150,000, (B) an acrylic copolymer containing α,β -ethylenic unsaturated nitrile monomer units, and (C) an α,β -ethylenic unsaturated nitrile/conjugated diene copolymer rubber having a number average molecular weight of 1000-20,000; and due to this feature these inventions in the present application offer the outstanding advantageous effect that the alloys have outstanding oil resistance and ozone resistance and outstanding resistance to solvent

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/015258

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

cracking.

Claim 4

The invention set forth in claim 4 involves an inventive step relative to documents 1-3, cited in the international search report.

Document 1-3 do not disclose crosslinked material formed by crosslinking a polymer alloy constituted from (A) an α, β -ethylenic unsaturated nitrile/conjugated diene copolymer rubber having a number average molecular weight of 50,000-150,000, (B) an acrylic copolymer containing α, β -ethylenic unsaturated nitrile monomer units, and (C) an α, β -ethylenic unsaturated nitrile/-conjugated diene copolymer rubber having a number average molecular weight of 1000-20,000; and due to this feature these inventions in the present application offer the outstanding advantageous effect that the material has outstanding oil resistance and ozone resistance and outstanding resistance to solvent cracking.

Claim 5

The invention set forth in claim 5 involves an inventive step relative to documents 1-3, cited in the international search report.

Document 1-3 do not disclose industrial components constituted from crosslinked material formed by crosslinking a polymer alloy constituted from (A) an α, β -ethylenic unsaturated nitrile/conjugated diene copolymer rubber having a number average molecular weight of 50,000-150,000, (B) an acrylic copolymer containing α, β -ethylenic unsaturated nitrile monomer units, and (C)

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/015258

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability:
citations and explanations supporting such statement

an α, β -ethylenic unsaturated nitrile/conjugated diene copolymer rubber having a number average molecular weight of 1000-20,000; and due to this feature these inventions in the present application offer the outstanding advantageous effect that the components have outstanding oil resistance and ozone resistance and outstanding resistance to solvent cracking.